

0830 – Welcome to the SWFSC (outline of plans and logistics for the Symposium).

8:45 – Keynote Presentation by NOAA Leadership who will introduce the agenda, the leaders for each day's events, and will lay out a road map for how we plan to achieve the goals and produce the products for the Symposium.

Mission Statement: The goal of this symposium is to assemble a group of scientists (some with extensive experience with UAS assets), aviation professionals, and managers and to have them work together to develop a framework or set of goals for the Agency relative to the application of UAS technologies to NOAA mandates over the next 5 years.

Day 1. Current applications of Unmanned Platforms to provide data relevant to meeting NOAA's Mandates

9:00 – Science Day Keynote Presentation by Session Chair (Dr. John Durban)

This day starts with a keynote from the science community laying out the goals of day one and describing how the talks and discussion periods will be structured. Talks are 10 minutes each with a 5-minute question and answer period after each talk. The session is followed by another 15 minutes for questions and answers.

9:15-9:30	Combined assessment surveys of Steller sea lions using NOAA Twin Otters and APH-22 hexacopters - Dr. Tom Gelatt.
9:30-9:45	Assessment activities on Northern Fur Seals and Alaska pinniped disturbance studies – Kathryn Sweeney.
9:45-10:00	Additions of counts of predators on krill from vertical aerial images captured from the APH-22 hexacopter – Dr. Jefferson Hinke.
10:00-10:15	A Comparison of Manned and Unmanned Aircrafts for Surveying Wildlife Populations: A Case Study of Gray Seal Populations on Muskeget Island, USA – Kimberly Murray.
10:15-10:30	Scan Eagle and manned platform assessments for large cetaceans in the Arctic compared - Dr. Robyn Angliss.
10:30-10:45	Questions and Answers for first session participants.
10:45-11:05	BREAK
11:05-11:20	Photogrammetry with small rotary UAS to assess the size, growth and body condition of whales - Dr. John Durban.
11:25-11:40	Remote health assessment of whales using small rotary UAS: inference from case photographs and breath sampling – Dr. Holly Fearnbach.
11:40-11:55	A comparison of assessments of body mass and condition of leopard seals based on measurements of anaesthetized animals and measurements from images taken with a small rotary wing UAS – Dr. Douglas Krause.
12:00-1:00	Lunch Break at SWFSC (sandwich orders delivered).
1:00-1:15	The Coyote Unmanned Aircraft System: Advancing the Technology Readiness of Low Altitude Expendable UAS Observations in Hurricanes to Address Critical Data Gaps, Improve Understanding and Enhance Future Forecasts of Intensity Change– Dr. Joe Cione.
1:15-1:30	Developing VTOL fixed wing capabilities for missions from NOAA Ships – Dr. Patricia Quinn.
1:30-1:45	Analysis of giant bluefin tuna and menhaden schools from images collected from small UAS - Dr. Michael Jech.
1:45-2:00	Use of the Global Hawk to provide severe storm forecasts –Jason Dunion

2:00-2:15	Questions and Answers from session participants
2:15-2:45	Break
2:45-3:00	Applications of small rotary wing technologies to studies of severe storms – Dr. Bruce Baker, OAR
3:00-3:15	GOES-R Near surface UAS Feasibility Demonstration Study – Frank Padula, NESDIS
3:15-3:30	HFR-Antenna pattern measurements via unmanned aerial vehicles – Eduardo Romero.
3:30-3:45	UAS for Environmental Assessments and Response Activities-Lessons learned and next steps – Michele Jacobi.
3:45-4:00	Use of small unmanned aircraft to study the lower Arctic troposphere – Dr. Gijs de Boer.
4:00-4:45	Reviews of sessions, questions and answers, and review of posters
4:45 – 6:00	Hor d'oeuvres and wine and beer social at the Center